

NEW TAXA AND COMBINATIONS IN MEXICAN ASTERACEAE  
(AGERATINA, BERLANDIERA AND VERBESINA)

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In connection with the preparation of a treatment of the Asteraceae of Mexico, the following new taxa and names are deemed necessary.

AGERATINA MANANTLANA B. Turner, sp.nov.

A. rubricauli (H.B.K.) King & H. Rob. simile sed foliis parvioribus ovatis, capitulis amplioribus corollis longioribus, et setis pappi numerosioribus (60-80) in 2-3 seriebus differt.

Apparently suffruticose herbs or shrublets over 40 cm high; stems densely hirsute-puberulous; leaves opposite, 4-7 cm long, 3.0-4.5 cm wide; petioles 10-20 mm long; blades thin, broadly ovate, 3(5)-nervate from the base, sparsely pubescent on both surfaces, glandular-punctate or atomiferous-glandular beneath, the margins crenulodentate, obtuse or rounded at the apices; heads ca 10, borne in a lax, but strict, terminal corymb, the ultimate peduncles 10-20 mm long; involucre ca 7 mm high, the bracts lanceolate to narrowly ovate, purplish, puberulent, not noticeably ribbed; corollas white, tubular, glabrous, 8-9 mm long; achenes 3.5-4.0 mm long, markedly hispid, the pappus 2-3 seriate, of numerous (60-80) bristles, the outer series 3-6 mm long, the inner series 8-10 mm long.

TYPE: MEXICO. JALISCO: Reserva Biosfera Sierra de Manantlan, Cerro Capulip, shallow valley between the two highest points on the road (19°33'N x 104°09'W), oak-pine woodland, ca 2800 m, 9 Mar 1987, H.H. Iltis, B.F. Benz, A. Vazquez G. & M. Chazaro B 29400 (holotype TEX; isotype WISC).

The species belongs to the subgenus Neogreenella and is perhaps closest to A. rubricaulis, but differs from the latter in leaf shape, head size, corolla size, and especially by the 2-3 seriate pappus. The latter character suggests a relationship with the A. mairetiana complex (Turner, 1987) but it is strikingly different from members of this complex, both in its presumably suffruticose habit and in features of the achene.

In McVaugh's (1984) treatment of Eupatorium (which includes Ageratina) the species will key to, or near, Eupatorium ceriferum, a member of the Ageratina mairetiana complex, but A. manantlana resembles that species not at all. Apparently the latter is a localized endemic of the Sierra de Manantlan.

VERBESINA LINEARIS (McVaugh) B. Turner, comb. nov.

Based upon Encelia linearis McVaugh, Contr. Univ. Michigan Herb.

9:414.1972.

McVaugh (1984) states that "This plant resembles no other known to me from Mexico. It is assigned to Encelia because of the alternate leaves, the very flat disk-achenes with two weak awns, and the presumed sterility of the ray florets." All of these characters are found, in combination, within the genus Verbesina and the species concerned is clearly related to V. parviflora, possessing all of the head and floral characters of that highly variable, widespread, species. Verbesina linearis has no obvious characters which might relate it to Encelia, the latter having distinctive style branches and flat, markedly ciliate, achenes which dehisce with the adjoining pales at maturity.

McVaugh (1984) also included withing his concept of Encelia, E. angustifolia Greenm, which Blake had correctly transferred to Verbesina (as V. angustissima Blake), the name V. angustifolia (Benth.) Blake having priority. I treat Encelia angustifolia as a synonym of Verbesina parviflora. However, McVaugh states that he treats the latter species under Encelia "for convenience only" and notes that examination of mature fruits might lead to its placement elsewhere. Strangely, he does observe that his Encelia angustissima "may be confused with V. parviflora var. zacatecana" but can be distinguished by its nearly glabrous peduncles with a few rather upwardly-appressed hairs (as opposed to densely retrosely-hispidulous hairs on the peduncles of V. parviflora). Actually, vestiture of the peduncles in the latter species is highly variable, even within Jalisco, some populations having upwardly turned hairs (e.g., Cronquist 11154) and others with retrose hairs, as noted by McVaugh. In short, peduncular pubescence aside, both Encelia linearis and E. angustifolia are closely related to Verbesina parviflora and should reside in that genus near their congeners.

BERLANDIERA LYRATA var. MONOCEPHALA B. Turner, var. nov.

A. Berlandiera lyrata A. Gray var. lyrata scapis monocephalis non ramosis, foliis non lobatis, et pedunculis dense albohirsutis differt.

The above Latin diagnosis was rendered without its designated name in Phytologia 64: 206.1988. This was occasioned by a secretarial error in that the line concerned was inadvertently deleted from the original disk in the redaction process. Of course I should have reproofed the secretary's work, but what's a disk for? In any case, the oversight is corrected here since I was not sure that the proposed name might stand without its designated "banner".

#### ACKNOWLEDGEMENTS

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#### LITERATURE CITED

McVaugh, R. 1984. Encelia, in Flora Novo-Galiciana 12: 325.

Turner, B.L. 1987. Study of the Ageratina mairiana complex. (Asteraceae-Eupatorieae). Phytologia 63: 417-427.

Turner, B.L. 1988. A new variety of Berlandiera lyrata from northwestern Mexico. Phytologia 64: 205-208.